

Essential Fish Habitat Description

Pollock (*Pollachius virens*)

In its *Report to Congress: Status of the Fisheries of the United States* (September 1997), NMFS determined there is not enough information to determine if pollock is overfished or approaching an overfished condition. Essential Fish Habitat for pollock is described as those areas of the coastal and offshore waters (out to the offshore U.S. boundary of the exclusive economic zone) that are designated on Figures 7.1 - 7.4 and in the accompanying table and meet the following conditions:

Eggs: Pelagic waters of the Gulf of Maine and Georges Bank as depicted in Figure 7.1. Generally, the following conditions exist where pollock eggs are found: sea surface temperatures less than 17° C, water depths 30 and 270 meters, and salinities between 32 - 32.8‰. Pollock eggs are often observed from October through June with peaks from November to February.

Larvae: Pelagic waters of the Gulf of Maine and Georges Bank as depicted in Figure 7.2. Generally, the following conditions exist where pollock larvae are found: sea surface temperatures less than 17° C and water depths between 10 and 250 meters. Pollock larvae are often observed from September to July with peaks from December to February.

Juveniles: Bottom habitats with aquatic vegetation or a substrate of sand, mud or rocks in the Gulf of Maine and Georges Bank as depicted in Figure 7.3. Generally, the following conditions exist where pollock juveniles are found: water temperatures below 18° C, depths from 0 - 250 meters, and salinities between 29 - 32‰.

Adults: Bottom habitats in the Gulf of Maine and Georges Bank and hard bottom habitats (including artificial reefs) off southern New England and the middle Atlantic south to New Jersey as depicted in Figure 7.4. Generally, the following conditions exist where pollock adults are found: water temperatures below 14° C, depths from 15 - 365 meters, and salinities between 31 - 34‰.

Spawning Adults: Bottom habitats with a substrate of hard, stony or rocky bottom in the Gulf of Maine and hard bottom habitats (including artificial reefs) off southern New England and the middle Atlantic south to New Jersey as depicted in Figure 7.4. Generally, the following conditions exist where pollock adults are found: water temperatures below 8° C, depths from 15 - 365 meters, and salinities between 32 - 32.8‰. Pollock are most often observed spawning during the months September to April with peaks from December to February.

All of the above EFH descriptions include those bays and estuaries listed on the following table, according to life history stage. The Council acknowledges potential seasonal and spatial variability of the conditions generally associated with this species.

**EFH Designation of Estuaries and Embayments
Pollock (*Pollachius virens*)**

Estuaries and Embayments	Eggs	Larvae	Juveniles	Adults	Spawning Adults
Passamaquoddy Bay		s	m,s	s	
Englishman/Machias Bay			m,s		
Narraguagus Bay			m,s		
Blue Hill Bay			m,s		
Penobscot Bay			m,s		
Muscongus Bay			m,s		
Damariscotta River			m,s	s	
Sheepscot River		s	m,s		
Kennebec / Androscoggin Rivers			m,s		
Casco Bay			m,s		
Saco Bay			m,s		
Wells Harbor					
Great Bay	s	s	s		
Merrimack River	m	m	m		
Massachusetts Bay	s	s	s	s	s
Boston Harbor	s	s	m,s		
Cape Cod Bay		s	m,s	s	
Waquoit Bay			s		
Buzzards Bay					
Narragansett Bay					
Long Island Sound			s	s	
Connecticut River					
Gardiners Bay					
Great South Bay			s		
Hudson River / Raritan Bay					
Barnegat Bay					
Delaware Bay					
Chincoteague Bay					
Chesapeake Bay					

S ≡ The EFH designation for this species includes the seawater salinity zone of this bay or estuary (salinity > 25.0‰).

M ≡ The EFH designation for this species includes the mixing water / brackish salinity zone of this bay or estuary (0.5 < salinity < 25.0‰).

F ≡ The EFH designation for this species includes the tidal freshwater salinity zone of this bay or estuary (0.0 < salinity < 0.5‰).

These EFH designations of estuaries and embayments are based on the NOAA Estuarine Living Marine Resources (ELMR) program (Jury *et al.* 1994; Stone *et al.* 1994). For a detailed view of the salinity zone boundaries, as described in the ELMR reports, please see Appendix B. The Council recognizes the spatial and temporal variability of estuarine and embayment environmental conditions generally associated with this species.

**Essential Fish Habitat
Pollock (*Pollachius virens*) Eggs**

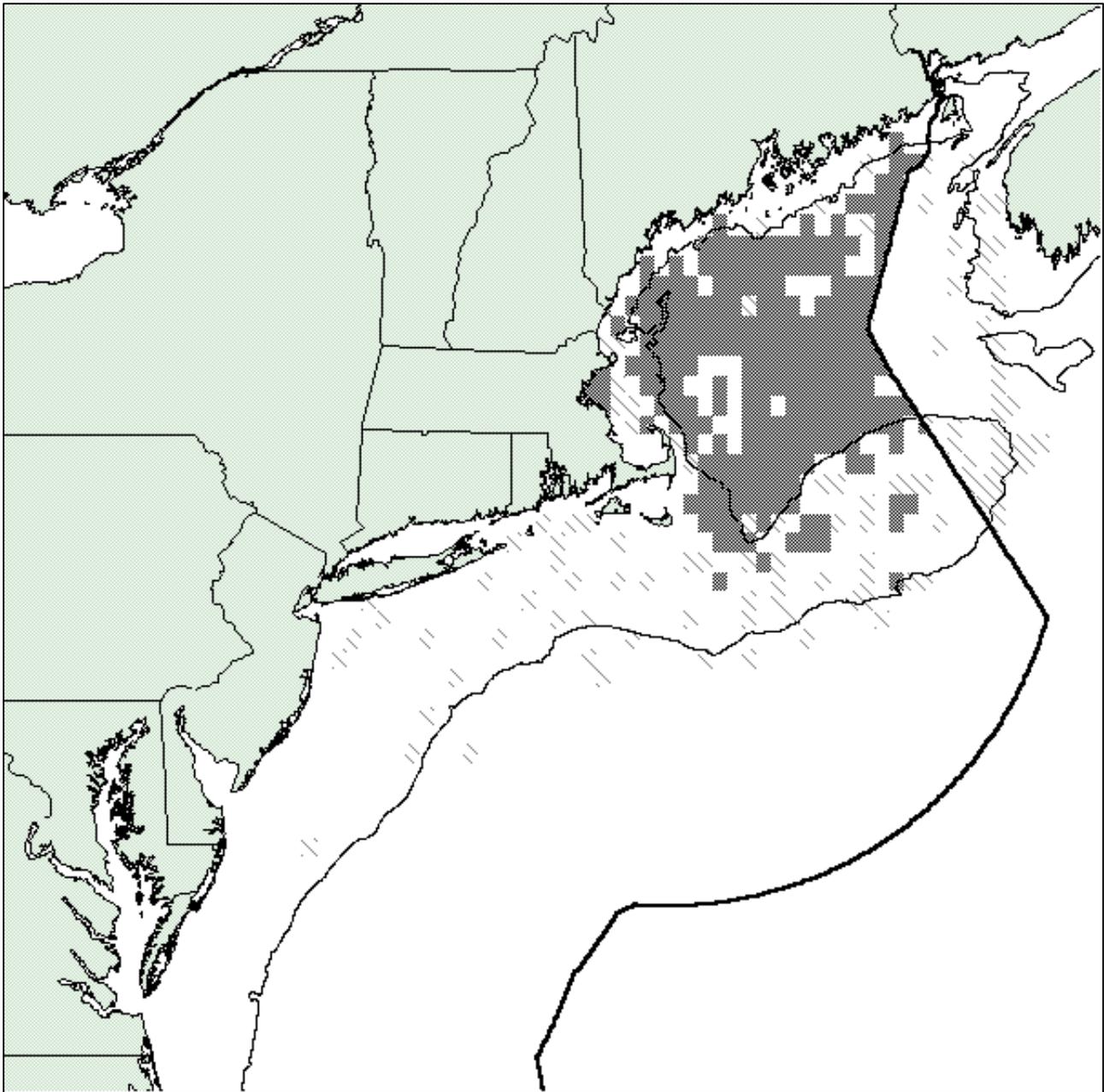


Figure 7.1: The EFH designation for pollock eggs is based upon alternative 3 for pollock adults. This designation also includes those bays and estuaries identified by the NOAA ELMR program as supporting pollock eggs at the "common" or "abundant" level. The observed distribution of pollock eggs is very patchy and widely dispersed and does not match up with distributions of juveniles or adults, thus the distribution of adults was used as a proxy. This alternative was selected as it appears to best identify that portion of the range of pollock most important to all life history stages. The light shading represents the entire observed range of pollock eggs.

Essential Fish Habitat
Pollock (*Pollachius virens*) Larvae

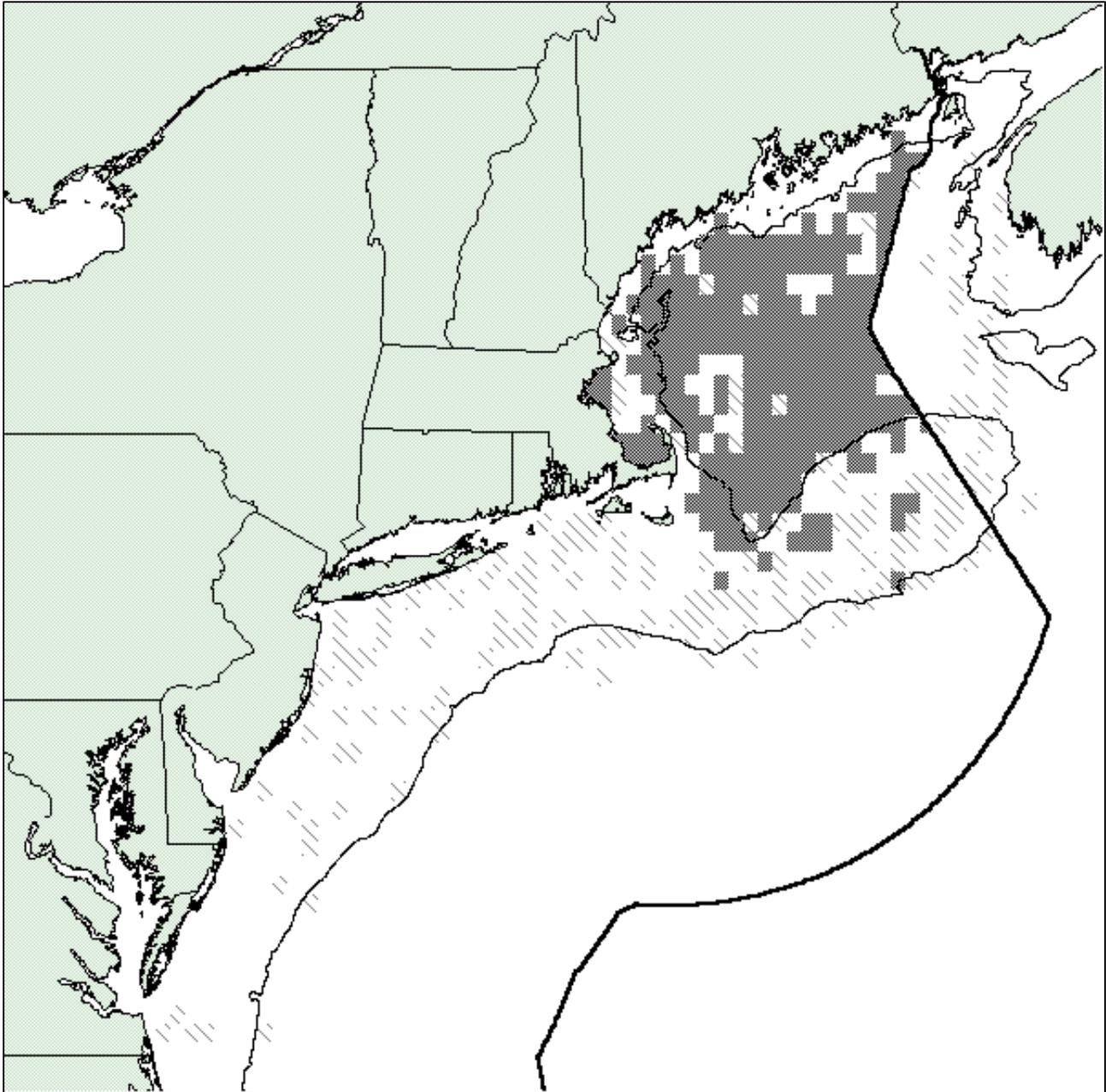


Figure 7.2: The EFH designation for pollock larvae is based upon alternative 3 for pollock adults. This designation also includes those bays and estuaries identified by the NOAA ELMR program as supporting pollock larvae at the "common" or "abundant" level. The observed distribution of pollock larvae is very patchy and widely dispersed and does not match up with distributions of juveniles or adults, thus the distribution of adults was used as a proxy. This alternative was selected as it appears to best identify that portion of the range of pollock most important to all life history stages. The light shading represents the entire observed range of pollock larvae.

Essential Fish Habitat
Pollock (*Pollachius virens*) Juveniles

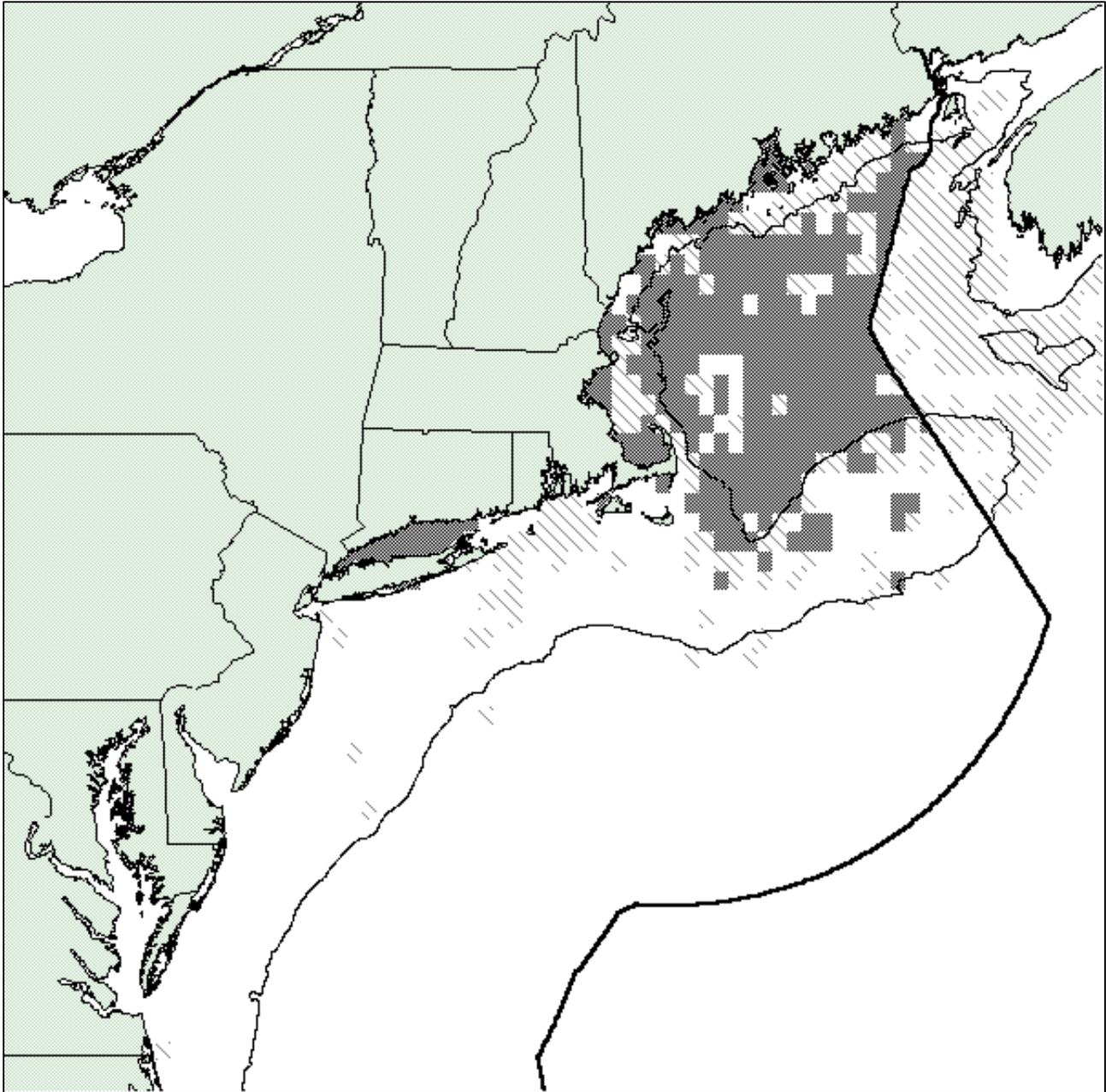


Figure 7.3: The EFH designation for juvenile pollock is based upon alternative 3 for pollock adults. This alternative was selected as it appears to best identify that portion of the range of pollock most important to all life history stages. The EFH designations also include the areas identified by the fishing industry and the inshore surveys as important for pollock, as well as those bays and estuaries identified by the NOAA ELMR program as supporting juvenile pollock at the "common" or "abundant" level. The light shading represents the entire observed range of juvenile pollock.

Essential Fish Habitat
Pollock (*Pollachius virens*) Adults

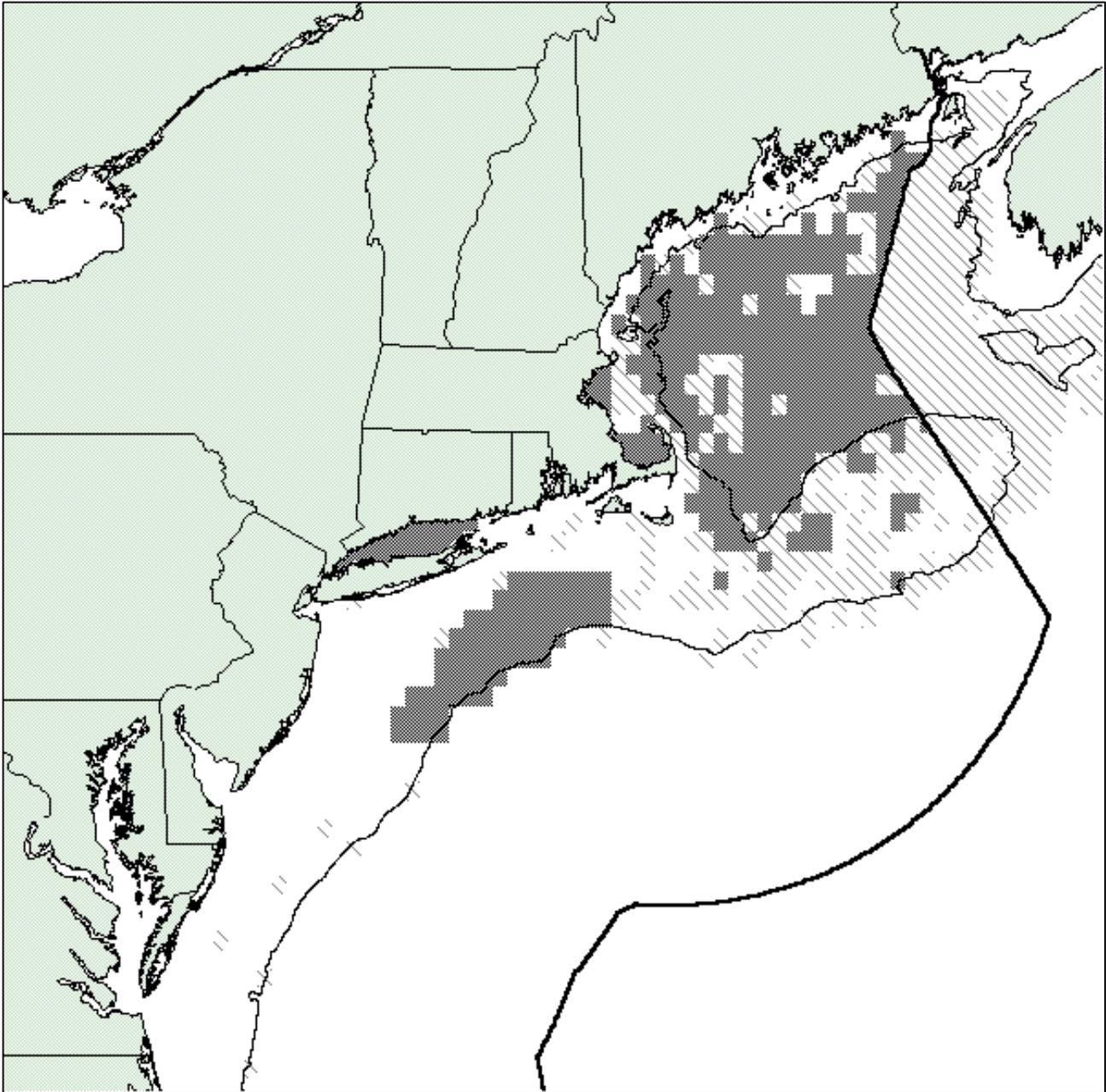


Figure 7.4: The EFH designation for adult pollock is based upon alternative 3 for pollock adults. This alternative was selected as it appears to best identify that portion of the range of pollock most important to all life history stages. The EFH designation also includes areas identified by the fishing industry and the inshore surveys as important for pollock, as well as those bays and estuaries identified by the NOAA ELMR program as supporting adult pollock at the "common" or "abundant" level. The light shading represents the entire observed range of adult pollock.